

REMARKS

Claims 21-40 are pending in the present application. The drawings were objected to under 37 C.F.R. 1.83(a). Claims 21-25, 29, 31 and 35-40 were rejected under 35 U.S.C. §103(a) as being unpatentable over Frankel, U.S. Patent Application No. 2002/0171843, in view of Spanner, U.S. Patent No. 6,535,290. Claims 26 and 27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Frankel in view of Spanner as applied to claim 21 above, and further in view of Cook, U.S. Patent No. 3,905,684. Claims 28, 30 and 32-34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Frankel in view of Spanner as applied to claim 21 above, and further in view of Amon, U.S. Patent No. 4,746,798.

The claims have been amended. Claims 28, 29 and 31 have been canceled. Reconsideration of the application is respectfully requested.

Objection to the drawings under 37 C.F.R. 1.83(a)

The drawings were objected to under 37 C.F.R. 1.83(a) as failing to show every feature of claim 28. Claim 28 has now been canceled.

Withdrawal of the objection to the drawings is respectfully submitted.

Amendments to independent claims

Independent claims 21, 39 and 40 have now been amended so as to recite “adjust[ing] a propagation direction of the first light beam as a function of the detected respective positions of the reference beams” (claims 21 and 39) and a control element configured to “adjust a respective propagation direction of the first and second light beams as a function of the detected respective positions of the reference beams” (claim 40). Support for the amendments may be found, for example, at paragraph 0033, page 8, lines 12-14, of the present specification, it is respectfully submitted that no new matter has been added.

Rejections under 35 U.S.C. §103(a)

Claims 21-25, 29, 31 and 35-40 were rejected under 35 U.S.C. §103(a) as being unpatentable over Frankel, U.S. Patent Application No. 2002/0171843, in view of Spanner, U.S. Patent No. 6,535,290. Claims 26 and 27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Frankel in view of Spanner as applied to claim 21 above, and further in view of Cook, U.S. Patent No. 3,905,684. Claims 28, 30 and 32-34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Frankel in view of Spanner as applied to claim 21 above, and further in view of Amon, U.S. Patent No. 4,746,798.

Frankel describes a phase-based wavelength measurement apparatus for determining an unknown wavelength of a laser by measuring the phase difference between two orthogonally polarized beams derived from the laser. See Abstract.

Spanner describes an optical position measuring device having a detector element 7 for detecting an interference beam of rays 10 and a signal-processing unit 9 that receives signals from the detector elements and provides positional values to a CNC. See col. 5, lines 31-35, col. 6, lines 25-34, and Fig. 1.

Cook describes an optical beam splitting system having a plurality of reflective surfaces. See Abstract.

Amos describes a radiometer having a group 25 of wavelength selective reflectors including reflectors 26a, 26b and 26c. See col., 6, lines 14-17.

Independent claims 21, 39 and 40 of the present application, as amended, recite “adjust[ing] a propagation direction of the first light beam as a function of the detected respective positions of the reference beams” (claims 21 and 39) and a control element configured to “adjust a respective

propagation direction of the first and second light beams as a function of the detected respective positions of the reference beams" (claim 40) wherein the reference beams are first and second reference beams split from a first light beam by respective beam splitting devices. It is respectfully submitted that neither of Frankel or Spanner teaches or suggests the above-recited features of independent claims 21, 39 and 40. In contrast, the detector element 7 and processing unit of Spanner merely provide positional values to the CNC. See Spanner, col. 6, lines 25-34. A propagation direction of a light beam is not adjusted as a function of detected respective positions of first and second reference beams split from the light beam by respective splitting devices, as recited in claims 21, 39 and 40. Frankel does not describe position detection at all. Because both Frankel and Spanner are missing at least the above-recited features of independent claims 21, 39 and 40, a combination of these references, to the extent proper, could not render claims 21, 39 or 40 or any of their respective dependent claims unpatentable. Nor do either of Cook or Amos teach or suggest the above-recited features of independent claims 21, 39 and 40 missing from Frankel and Spanner. Therefore, a combination of all of these references, to the extent proper, could not render any of dependent claims 26-28, 30 and 32-34 unpatentable.

Withdrawal of the respective rejections of claims 21-40 under 35 U.S.C. 103(a) based on respective combinations of Frankel, Spanner, Cook and Amos is respectfully requested.

